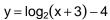
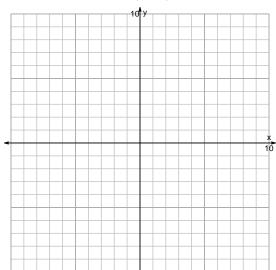
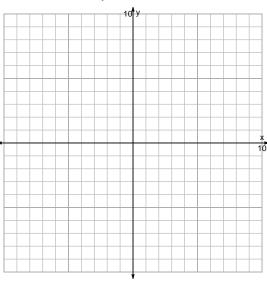
s18quiz: EXP LOG (QUIZ v285)

1. Graph $y = \log_2(x+3) - 4$ and $y = 2^{x+4} - 3$ on the grids below. Also, draw any asymptotes with dotted lines.





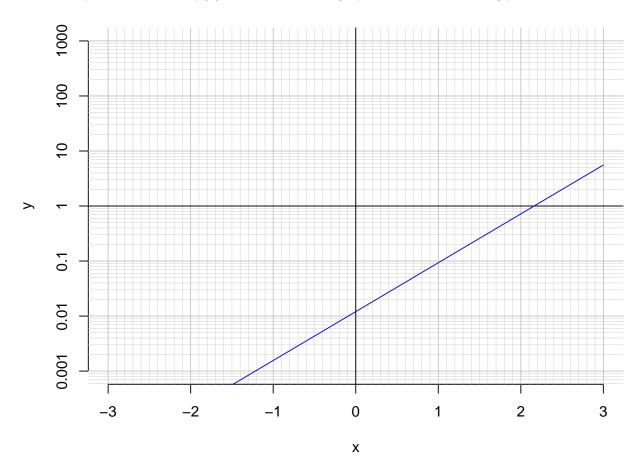
$$y = 2^{x+4} - 3$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-11 = \left(\frac{-5}{3}\right) \cdot 2^{-7t/4}$$

3. An exponential function $f(x) = 0.012 \cdot e^{2.04x}$ is graphed below on a semi-log plot.



- a. Using the plot above, evaluate f(-0.2).
- b. Express $f^{-1}(x)$, the inverse of f.
- c. Using the plot above, evaluate $f^{-1}(2)$.